



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION 8**  
**999 18<sup>TH</sup> STREET - SUITE 500**  
**DENVER, CO 80202-2466**  
<http://www.epa.gov/region08>

January 11, 2000

Ref: 8EPR-EP

**VIA FACSIMILE AND MAIL**

Nancy Doelger, Team Coordinator  
Casper Field Office  
Bureau of Land Management  
1701 East E Street  
Casper, WY 82601

RE: Horse Creek Coal DEIS

Dear Ms Doelger:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act (CAA), Region 8 of the U. S. Environmental Protection Agency (EPA) has reviewed the draft Environmental Impact Statement (DEIS) for the Horse Creek Coal Lease By Application (LBA) Tract in southeast Campbell and northeast Converse Counties, Wyoming. EPA has prepared comments that should be addressed in the final Environmental Impact Statement (FEIS).

This DEIS analyzes the potential environmental impact of issuing a federal coal lease and mining the federal coal in the Horse Creek LBA Tract. This Tract is adjacent to the existing Antelope Mine owned and operated by the Antelope Coal Company (ACC), a subsidiary of the Kennecott Energy Company.

The federal coal reserves have been applied for as a maintenance tract for the Antelope Mine. The Horse Creek LBA includes approximately 2,838 acres and contains an estimated 357 million tons of coal reserves. Approximately 265 million tons of these reserves are mineable. These mineable reserves would allow the Antelope Mine to extend its operating life for approximately eight years at a mining rate of 30 million tons per year. There is ongoing coal mining and exploration in the area as mapped in *Figure 1-1, General Location*



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*Map with Federal Coal Leases, LBA's, and Wyodak Coal Bed Methane EIS Study Area.*

EPA finds this document to be well written and very thorough particularly with respect to cumulative environmental impacts. Page ES-13 discusses reasonably foreseeable future actions including coal bed methane development that is likely to move southward into the vicinity of the Horse Creek Coal LBA and the proposed construction of the DM&E rail line that would transport coal resulting from the historical 10 percent growth rate of coal production in the Powder River Basin. In addition, EPA appreciates the summary of "Issues and Concerns" shown on page 1-13. EPA does have a few concerns that should be addressed in the Final Horse Creek Coal Lease Application EIS.

The discussion of environmental impacts and steps to mitigate these impacts is the basis for an environmental impact statement. This DEIS has a recurring theme that plans to monitor environmental impacts and plans to mitigate potential impacts are included in the existing approved Antelope Mine mining and reclamation plan (see page 4-22 for discussion on impacts to MBHFI). This DEIS should show a summary of the monitored impacts for a given level of mitigation and indicate the reasonableness of continuing this mitigation or possibly the need to increase mitigation based on historical monitoring results.

EPA is concerned that, waiting until the final permitting process to fully define and commit to mitigation and monitoring measures to address potential adverse impacts from leasing and coal extraction, ties the hands of the decision-maker and public in defining an environmentally preferable alternative. Alternatives to the proposed action need to be based on mitigation of environmental impacts rather than simply the amount of land disturbed. Please refer to NEPA regulations 40 CFR 1502.14 (c) and (f) which state that "agencies shall ... include reasonable alternatives not within the jurisdiction of the lead agency" and "agencies shall ... include appropriate mitigation measures not already included in the proposed action or alternatives."

There are two key environmental concerns in this DEIS that need to be

addressed. The first concern is the lack of mitigation and/or steps for measuring and/or reducing nitrogen oxides emissions resulting from blasting of coal and overburden. Newspaper articles, citizens, and environmental groups have come forward with concerns that these emissions may be at levels that are hazardous to human health. As a potentially significant environmental impact, this NEPA document should disclose to the public what steps can be taken to mitigate these potentially harmful effects. An example of a mitigation action that BLM could recommend is to only allow blasting to occur during daylight hours when the atmosphere can adequately disperse the air pollutants (ie. not blasting when radiational inversions exist). Certainly this mitigation is not required in any existing air permit for the Antelope Mine, however, as part of an environmental impact statement, BLM can recommend this mitigation in its environmentally preferable alternative and ask for feed-back from the public. This information will assist the Bureau of Land Management in making the most appropriate decision for the new coal-lease.

The second concern is impacts to visibility in Class I areas due to increases in cumulative air emissions from coal-bed methane production, coal mining in the Powder River Basin and coal trains. The cumulative air emission from activities in the Powder River Basin are predicted to cause numerous days of visibility impairment greater than 1 deciview in several Class I areas including the Badlands National Park (70 days/yr), the Wind Cave National Park (45 days/yr), and the Northern Cheyenne Reservation (8 days/yr). This NEPA document should be addressing what types of mitigation could be incorporated to protect visibility in these Class I areas. Analysis of steps to protect visibility would assist the decision-maker in choosing which recommendations and/or stipulations to make in the Record of Decision, and this information would be of particular interest to the states of Wyoming and South Dakota which, in the next few years, will be required to develop plans to protect visibility in their Class I areas as a result of the recent promulgation of the Regional Haze Rule.

EPA recognizes that there are a number of sources in the Powder River Basin which are contributing to the predicted visibility degradation (Table 4-8) that are outside the jurisdiction of BLM. However, the DEIS does not contain any discussion of mitigation measures to address these cumulative impacts. As discussed in the Council on Environmental Quality Memorandum concerning the "Forty Most Asked Questions" on the regulations published in

1981( Federal Register, 46 FR 18026), the DEIS is considered as the most comprehensive environmental document to be published on a project and should contain an identification of all relevant and reasonable mitigation measures that could be used to off-set adverse impacts, even if they are outside the jurisdiction of the lead or cooperating agencies. In addition, the DEIS should assess the probability of implementing the relevant, reasonable and appropriate mitigation measures.

EPA suggests, that the starting point for addressing significant cumulative impacts, is the develop of a comprehensive impact assessment and planning document for the Basin in order to address the multiple incremental developments and their associated impacts that would occur in the Powder River Basin. Appropriate mitigation measures could be defined in this document to address emissions from coal bed methane, incremental increases in coal mining production, power plant construction and operation, and railroad expansion.

A few specific responses on the DEIS air quality analysis are as follows:

1. Page 3-19, first paragraph. “As the figure illustrates (Figure 3-5), substantial increases of coal production and overburden handled by the mine have not been accompanied by any increase in ambient concentrations of TSP.” The interpretation of Figure 3-5 can be misleading since the objective of the figure is to show the relationship between coal/overburden production and the resulting contributions to TSP concentrations from this production. For this reason, the figure should be modified to show the relationship between coal/overburden production and the incremental difference between TSP levels measured at TSP Station 3 (background TSP levels) and Station 4. In addition, the units for Figure 3-5 should likely be changed from “mg/l” to “Fg/m<sup>3</sup>”.

2. Page 3-19, Table 3-5. Recommend adding “Annual” to the title “Ambient NO<sub>2</sub> Concentration Data”.
3. Page 4-9, right column. “The required mitigation measures, which are discussed in Section 4.3.4, would minimize this impact.” Section 4.3.4 does not exist. Recommend that specific mitigation measures to reduce air contaminants be listed in Section 4.3.

Based on procedures EPA uses to evaluate the DEIS and the potential environmental impact of this coal lease project, the DEIS will be listed in the Federal Register as **EC-2** (Environmental Concerns, Insufficient Information). This rating indicates that EPA has identified areas of potential impacts that should be avoided to fully protect the environment (air emissions contributing to significant visibility impairment in Class I areas, and blasting emissions that are potentially hazardous to human health) and that there is insufficient information (ie. suggested air pollution controls and/or mitigation measures) to fully assess the reduced environmental impacts resulting from proposed mitigation measures.

Thank you for the opportunity to review and comment on this DEIS. If you have any questions or concerns about our comments on this DEIS, please call me at  
(303) 312-6228.

Sincerely,

Original Signed by Cynthia Cody

Cynthia Cody, Chief  
NEPA Unit  
Ecosystem Protection Program

Enclosure

